

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants : Hiroyuki HOJO et al.

Group Art Unit: 3711

Appl. No. : 10/758,019

Examiner: Kien T. Nguyen

Filed : January 16, 2004

Confirmation No.: 5762

For : BALANCE PRACTICING MACHINE

REPLY BRIEF UNDER 37 C.F.R. §41.41

Commissioner for Patents
United States Patent and Trademark Office
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Sir:

In response to the Examiner's Answer dated April 18, 2008 (i.e., the Notification Date) to the Appeal Brief filed on January 24, 2008, for which a two-month period for filing a Reply Brief under 37 C.F.R. § 41.41 is set to expire on June 18, 2008, Appellants submit the present Reply Brief.

No additional fee is believed to be required for filing the instant Appeal Brief. However, if for any reason any necessary fee is not associated with this file, the undersigned authorizes the charging of any fee for the Reply Brief and/or any other necessary fee to Deposit Account No. 19 - 0089.

Appellants maintain that each reason set forth in the Appeal Brief filed January 24, 2008 for the patentability of the pending claims is correct and again request that the decision to reject claims 1-11, 13-18, and 20-24 under 35 U.S.C. 103(a) be reversed and that the application be

returned to the Examining Group for allowance. Claims 1-11, 13-18, and 20-24 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al., U.S. Patent No. 4,988,300 (hereinafter “Yamaguchi”) in view of Friedson, U.S. Patent No. 6,332,307.

REMARKS

The Examiner’s position regarding the rejection of claims 1-11, 13-18, and 20-24 under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Friedson, as set forth in the Examiner’s Answer, is in error for the following reasons.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the appellants are under no obligation to submit evidence of nonobviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.¹ Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on

¹ While the *KSR* court rejected a rigid application of the teaching, suggestion, or motivation (“TSM”) test in an obviousness inquiry, the [Supreme] Court acknowledged the importance of identifying “a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed invention does” in an obviousness determination. *Takeda Chemical Industries, Ltd. v. Alphapharm Pty, Ltd.*, 492 F.3d 1350, 1356-1357 (Fed. Cir. 2007) (quoting *KSR International Co. v. Teleflex Inc.*, --- U.S. ---, 127 S.Ct. 1727, 1731 (2007)).

applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP §2142.

The present invention relates to a balance practicing machine. More specifically, independent claims 1 and 18 recite, in combination with other features, *an expandable and contractible member provided at a location of said seat corresponding to thighs of the user sitting on said seat, and a mechanism that automatically repeatedly expands and contracts said expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during operation of the drive mechanism to provide compound motion to the seat.*

Claims 2-11, and 13-17 depend from independent claim 1, while claims 20-24 depend from independent claim 18. As such, claims 2-11, 13-17, and 20-24 also recite, *inter alia, at least an expandable and contractible member provided at a location of said seat corresponding to thighs of the user sitting on said seat, and a mechanism that automatically repeatedly expands and contracts said expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during operation of the drive mechanism to provide compound motion to the seat.*

As set forth on pages 3 and 4 of the Examiner's Answer dated April 18, 2008, the Examiner asserts that Yamaguchi discloses all of the features of the invention claimed in claims 1-12 and 19 except for an expandable and contractible member provided on a seating surface of the seat. The Examiner then takes the position that "Friedson disclosed a saddle assembly comprising an expandable and contractible member in a form of an air blader (25)(see Fig.7) providing on each side of the saddle which inherently including positions in oppose the thighs

and knees of the user, and a mechanism (26) for expanding and contracting the member (see column 4, lines 64-67 and column 5, lines 1-9). Fig. 7 shows a side view of the saddle which has only one inflatable bladder (25). The saddle of Friedson has two panels (15) (see Fig. 2) and each panel (15) has an inflatable bladder which constitute first and second expandable and contractible elements on opposite side of the seat (claims 4-10) (see, col. 4, lines 64 to col. 7, line 7).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the machine of Yamaguchi et al by integrally adding the bladder as taught by Friedson for the purpose of providing comfort for the user as well as enhancing the motion of the seat during operation."

The Examiner also states on page 4 of the Examiner's Answer that "[R]egarding the limitation "automatically" in claims 1 and 18, it is well settled that it is not an invention to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result see *In re Venner*, 120 USPQ 192 (CCPA 1958).

I. Claims 1 and 18

Appellants again respectfully disagree with the Examiner's rejection, and submit that no proper combination of the applied art discloses or suggests the features of at least independent claims 1 and 18.

(i) Yamaguchi, as admitted by the Examiner, fails to provide a balance practicing device as claimed, and Friedson fails to cure the deficiencies of Yamaguchi. Furthermore, even assuming, arguendo, that the teachings of YAMAGUCHI and FRIEDSON could be properly combined, Appellants' claimed balance practicing machine would not have resulted from the combined teachings thereof.

Yamaguchi discloses a riding simulator. As apparently recognized by the Examiner, Yamaguchi does not disclose in any manner "an expandable and contractible member provided at a location of thighs of the user sitting on said seat", or a "a mechanism that automatically repeatedly expands and contracts said expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during operation of the drive mechanism to provide compound motion to the seat", as required by independent claims 1 and 18.

Thus, the Examiner has proposed to combine the teachings of Friedson with those of Yamaguchi in an attempt to provide the missing elements.

Friedson is directed to a collapsible saddle assembly. As shown in figure 7 and as described in column 4, line 55 through column 5, line 10, Friedson includes a cavity 21 that may be filled so as to "accommodate a different user or equestrian application". The cavity may be filled with a filler material such as wool stuffing or polyurethane, or the cavity may include a bladder filled with air. Friedson includes an access opening 23 for inserting and removing filler (*i.e.*, expanding and contracting the cavity) or a valve 26 for filling and removing air from the bladder (*i.e.*, expanding or contracting the bladder). While Appellants admit that Friedson may suggest to one of ordinary skill in the art that such a saddle adjustment assembly may be suitable for modification of the saddle of the exercising device of Yamaguchi, Friedson clearly does not teach or suggest that the cavity should be, or even could be, expanded or contracted *during operation of the drive mechanism to provide compound motion to the seat*, much less repeatedly expanded and contracted during operation of the exercising device.

Accordingly, the Friedson patent fails to teach or suggest a balance practicing machine including, inter alia, an expandable and contractible member provided at a location of the seat corresponding to thighs of the user sitting on the seat, and a mechanism that automatically repeatedly expands and contracts the expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during operation of the drive mechanism to provide compound motion to the seat, as recited in claims 1 and 18. Therefore, even if the teachings of Friedson could be properly combined with the teachings of Yamaguchi, such combination would not result in the invention recited in Appellants' independent claims 1 and 18. Thus, the rejection of independent claims 1 and 18 under 35 U.S.C. § 103(a) based on Yamaguchi and Friedson is improper for this reason alone.

(ii) The examiner's reasoning for combining the teachings of Yamaguchi et al and Friedson is defective on its face.

The Examiner has concluded that it would have been obvious to combine the teachings of and Friedson "for the purpose of providing comfort for the user as well as enhancing the motion of the seat during operation" (Examiner's Answer, page 4, emphasis added). While combining the teachings of Friedson with those of Yamaguchi et al may provide comfort to the user of the exercising device of Yamaguchi et al, clearly there is nothing in either applied reference to suggest that such a combination would enhance the motion of the seat during operation. At best, Friedson teaches that the bladders can be inflated or deflated "to accommodate a different user or equestrian application" (Column 5, lines 5-7). This is a far cry from "enhancing the motion of the seat during operation". Thus, the Examiner's reasons for combining the reference teachings are defective, and

the decision to reject claims 1 and 18 under 35 U.S.C. § 103(a) should be reversed for this additional reason.

(iii) The Examiner has not provided any factual evidence to support the conclusion that it would have been obvious to repeatedly expand and contract the bladder 25 of Friedson during use with the machine of Yamaguchi.

In the Response to Arguments of the Final Office Action dated May 29, 2007, the Examiner has asserted that the term “repeatedly” in claims 1 and 18 does not limit as to how or how often, and/or when the mechanism “repeatedly” expands and contracts the member. The Examiner has further asserted that the valve 26 of Friedson is “conceivably capable” of repeatedly inflating (expanding) and deflating (contracting) the bladder 25, and maintains that such interpretation of Friedson clearly meets the claimed invention in the above explanation. The Examiner has also asserted that the appellants failed to specifically point out the structural differences between the claimed invention and the combination of Yamaguchi and Friedson except the assertion that the combination of Yamaguchi and Friedson cannot perform the intended use/function.

Addressing the Examiner’s first assertion, that the term “repeatedly” does not limit as to how or how often, and/or when the mechanism “repeatedly” expands and contracts, Appellants again respectfully note that Webster’s New World Dictionary of American English, Third College Edition, 1991, defines “repeated” as “said, made, done, or happening again, or again and again”. As apparent from Appellants specification, “repeatedly” as used in the context of claims 1 and 18 means “happening again and again”. While Appellants may agree that “repeatedly” may not indicate how or how often, and/or when the mechanism “repeatedly” expands and contracts, it clearly does limit

the operation to expanding and contracting repeatedly, i.e., again and again. The Examiner has not provided any factual evidence to support the position that it would have been obvious to expand and contract the bladder 25 of Friedson during use with the machine of Yamaguchi, much less that it should be repeatedly expanded and contracted. Thus, the term “repeatedly” is clear, and clearly limits the mechanism and operation of Appellants’claimed balance practicing device to include repeated expanding and contracting of the expandable and contractible member, which is clearly neither taught nor suggested by Yamaguchi or Friedson. Accordingly, the Examiner’s rejection of independent claims 1 and 18 under 35 U.S.C. § 103(a) is defective for this additional reason.

Moreover, contrary to the Examiner’s assertion that the expression “automatically repeatedly expands and contracts said expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during operation of the drive mechanism to provide compound motion to the seat” is a statement of intended use, this recitation in claims 1 and 18 is a positive description of how the claimed “mechanism” operates to provide the claimed “compound motion of the seat. Appellants are entitled to broadly recite their claimed “mechanism” by what it does, rather than what it is, in the absence of any applied prior art that teaches the above described operation of the claimed “mechanism”.

Furthermore, with regard to the limitation “automatically” in claims 1 and 18, the Examiner asserts that it is well settled that it is not an invention to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result in view of In re Venner, 120 USPQ 192 (CCPA 1958).

Without disagreeing as to the underlying principal of Venner, Appellants again respectfully disagree with the Examiner's assertion for the simple reason that there is no teaching or suggestion in Friedson of even a manual repeated expansion and contraction of the valve, nor is there any reason to do so. The Examiner's bald statement that the device of Friedson is "conceivably capable" of such operation is not the standard for obviousness set forth in 35 U.S.C. § 103(a), which is what would have been obvious at the time of Appellants' invention to one having ordinary skill in the art. Accordingly, since there is no teaching or suggestion of manual repeated expanding and contracting of the bladder 25 of Friedson, clearly there can be no support for the Examiner's use of the per se rule "that it is not an invention to broadly provided a mechanical or automatic means to replace manual activity which has accomplished the same result". There is no evidence in the applied prior art of any such manual activity which has accomplished Appellants' claimed result, and thus no reason to further bootstrap a faulty obviousness rejection with further faulty supposed legal support. Again, Appellants respectfully submit that the Examiner has not presented any factual evidence whatsoever of the obviousness of Appellants' claimed automatically repeatedly expanding and contracting of the expandable and contractible member to provide compound motion of the seat in the manner recited in independent claims 1 and 18. Therefore, the rejection of independent claims 1 and 18 under 35 U.S.C. § 103(a) based on Yamaguchi and Friedson is improper for these additional reasons.

(iv) There is nothing in the cited prior art that would lead one of ordinary skill in the art to make the modification suggested by the Examiner in the rejection of claims 1 and 18 under 35 U.S.C. § 103(a) over Yamaguchi in view of Friedson.

In this regard, Appellants note that Yamaguchi is relevant to a balance practicing machine, whereas the device of Friedson is relevant to a saddle for actual horse back riding. As noted above, while it might be obvious to provide the saddle of the device of Yamaguchi with a saddle adjustment device in accordance with the teachings of Friedson, the only reason to reach the conclusion that such combination of the teachings of Yamaguchi and Friedson would provide an exercising device as recited in claims 1 and 18 that includes, *inter alia*, "a mechanism that automatically repeatedly expands and contracts the expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during operation of the drive mechanism to provide compound motion to the seat" can only result from a review of Appellants' disclosure and the application of impermissible hindsight. Neither Yamaguchi nor Friedson teaches anything related to Appellants' claimed drive mechanism that automatically repeatedly expands and contracts the expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during operation of the drive mechanism to provide compound motion to the seat. The only such teaching appears in Appellants' disclosure, and adoption of this teaching from Appellants' disclosure is clearly impermissible hindsight. Thus, the rejection of claims 1 and 18 under 35 U.S.C. § 103(a) over the teachings of Yamaguchi and Friedson is improper for this additional reason.

Accordingly, the rejection of independent claims 1 and 18 under 35 U.S.C. § 103(a) over Yamaguchi in view of Friedson is improper for all the above reasons and withdrawal thereof is respectfully requested.

II. Claims 4-8, 15, 17, and 20-24

The Examiner's rejections of claims 4-8, 15, 17 and 20-24 have been adequately addressed in the Brief, and in the interest of brevity will not be further addressed in this Reply Brief.

Accordingly, the rejection of dependent claims 4 - 8, 15, 17, and 20-24 under 35 U.S.C. § 103(a) over Yamaguchi et al in view of Friedson is improper in view of their respective dependency from allowable claims 1 and 18, but also for all the reasons set forth in the Brief, and withdrawal of the rejection thereof is respectfully requested.

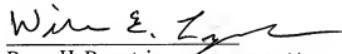
III. Results in other Patent Offices

Appellants note that although claims 1 and 18, including the recitation "a mechanism that automatically repeatedly expands and contracts said expandable and contractible member in alternately repeating upwardly-outwardly and downwardly-inwardly directions during operation of the drive mechanism to provide compound motion to the seat" as noted above, have not been allowed by the U. S. Patent and Trademark Office, other countries from around the world have granted patents on Appellants' balance practicing machine. In fact, Japan and China have granted patents on the balance practicing machine, and the EPO has granted a patent that includes claims having the recitation "mechanism that repeatedly performs expansion and contraction during operation of the drive mechanism".

Conclusion

In view of the foregoing remarks, Appellants submit that claims 1-11, 13-18, and 20-24 are patentably distinct from the prior art of record and are in condition for allowance. Accordingly, Appellants respectfully request that the Board reverse the Examiner's decision to reject claims 1-11, 13-18, and 20-24 and remand the application to the Examiner for allowance of the pending claims.

Respectfully submitted,
Hiroyuki HOJO et al.


Bruce H. Bernstein William E. Lyddane
Reg. No. 29,027 Reg. No. 41,568

June 17, 2008
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191